

#2



OIPE

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/080,979

DATE: 03/08/2002

TIME: 15:16:17

Input Set : A:\ISIS5028.ST25.txt

Output Set: N:\CRF3\03082002\J080979.raw

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3 <110> APPLICANT: Cook, Philip Dan
4      Manoharan, Muthiah
5      Bennett, Frank C.
7 <120> TITLE OF INVENTION: Oligonucleotide Conjugates For Hepatic Delivery
9 <130> FILE REFERENCE: Isis-5028
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/080,979
C--> 11 <141> CURRENT FILING DATE: 2002-02-22
11 <160> NUMBER OF SEQ ID NOS: 78
13 <170> SOFTWARE: PatentIn version 3.1
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 11
17 <212> TYPE: DNA
18 <213> ORGANISM: Artificial Sequence
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21 <223> OTHER INFORMATION: Oligonucleotide
23 <220> FEATURE:
24 <221> NAME/KEY: misc_feature
25 <222> LOCATION: (6)..(6)
26 <223> OTHER INFORMATION: nucleotide functionalized to incorporate a pentyl-N-
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27      functionality
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34 <210> SEQ ID NO: 2
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37 <213> ORGANISM: Artificial Sequence
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Oligonucleotide
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43 <221> NAME/KEY: misc_feature
44 <222> LOCATION: (9)..(9)
45 <223> OTHER INFORMATION: nucleotide functionalized to incorporate a pentyl-N-
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46      functionality
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56 <213> ORGANISM: Artificial Sequence
58 <220> FEATURE:
59 <223> OTHER INFORMATION: Oligonucleotide
61 <220> FEATURE:

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62 <221> NAME/KEY: misc_feature

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64 <223> OTHER INFORMATION: phosphorothioate inter-nucleotide linkage
67 <220> FEATURE:
68 <221> NAME/KEY: misc_feature
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70 <223> OTHER INFORMATION: nucleotide functionalized to incorporate a pentyl-N-
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71      unctinality
74 <400> SEQUENCE: 3
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78 <210> SEQ ID NO: 4
79 <211> LENGTH: 18
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81 <213> ORGANISM: Artificial Sequence
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86 <220> FEATURE:
87 <221> NAME/KEY: misc_feature
88 <222> LOCATION: (1)..(18)
89 <223> OTHER INFORMATION: phosphorothioate inter-nucleotide linkage
92 <220> FEATURE:
93 <221> NAME/KEY: misc_feature
94 <222> LOCATION: (15)..(15)
95 <223> OTHER INFORMATION: nucleotide functionalized to incorporate a pentyl-N-
phthalimido f
96      unctinality
99 <400> SEQUENCE: 4
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103 <210> SEQ ID NO: 5
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105 <212> TYPE: RNA
106 <213> ORGANISM: Artificial Sequence
108 <220> FEATURE:
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113 <222> LOCATION: (1)..(1)
114 <223> OTHER INFORMATION: 2'-O-modified phosphoramidite
117 <220> FEATURE:
118 <221> NAME/KEY: misc_feature
119 <222> LOCATION: (10)..(10)
120 <223> OTHER INFORMATION: 2'-O-modified phosphoramidite
123 <400> SEQUENCE: 5
124 ugaggccau agcgaggc 18
127 <210> SEQ ID NO: 6
128 <211> LENGTH: 16
129 <212> TYPE: DNA
130 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: Oligonucleotide
135 <400> SEQUENCE: 6

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136 tccaggtgtc cgcac                                     16
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148 <221> NAME/KEY: misc_feature
149 <222> LOCATION: (3)..(3)
150 <223> OTHER INFORMATION: nucleotide functionalized to incorporate a pentylamino
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151     ity
154 <220> FEATURE:
155 <221> NAME/KEY: misc_feature
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157 <223> OTHER INFORMATION: nucleotide functionalized to incorporate a pentylamino
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163 <222> LOCATION: (13)..(13)
164 <223> OTHER INFORMATION: nucleotide functionalized to incorporate a pentylamino
functional
165     ity
168 <220> FEATURE:
169 <221> NAME/KEY: misc_feature
170 <222> LOCATION: (16)..(16)
171 <223> OTHER INFORMATION: nucleotide functionalized to incorporate a pentylamino
functional
172     ity
175 <400> SEQUENCE: 7
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182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Oligonucleotide
187 <400> SEQUENCE: 8
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192 <211> LENGTH: 17
193 <212> TYPE: RNA
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
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203 <210> SEQ ID NO: 10
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205 <212> TYPE: RNA
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233 <223> OTHER INFORMATION: Oligonucleotide
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241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
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252 <211> LENGTH: 11
253 <212> TYPE: DNA
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259 <220> FEATURE:
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261 <222> LOCATION: (6)..(6)
262 <223> OTHER INFORMATION: hexyl-(N-phthalimido)amino]-uridine
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266 gcgtguctgc g 11
269 <210> SEQ ID NO: 15
270 <211> LENGTH: 18
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272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Oligonucleotide
277 <220> FEATURE:
278 <221> NAME/KEY: misc_feature
279 <222> LOCATION: (1)..(1)

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Input Set : A:\ISIS5028.ST25.txt

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280 <223> OTHER INFORMATION: 2'-O-modified phosphoramidite
283 <220> FEATURE:
284 <221> NAME/KEY: misc_feature
285 <222> LOCATION: (18)..(18)
286 <223> OTHER INFORMATION: non-nucleoside 6-carbon amino linker
289 <400> SEQUENCE: 15
290 ugggagccat agcgaggc 18
293 <210> SEQ ID NO: 16
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295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Oligonucleotide
301 <220> FEATURE:
302 <221> NAME/KEY: misc_feature
303 <222> LOCATION: (10)..(10)
304 <223> OTHER INFORMATION: 2'-O-modified phosphoramidite
307 <400> SEQUENCE: 16
308 tgggagccau agcgaggc 18
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321 <222> LOCATION: (1)..(1)
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328 <223> OTHER INFORMATION: 2'-O-methyl
331 <220> FEATURE:
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333 <222> LOCATION: (20)..(20)
334 <223> OTHER INFORMATION: non-nucleoside 6-carbon amino linker
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338 uctgagtagc agaggagctc 20
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343 <212> TYPE: DNA
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350 <221> NAME/KEY: misc_feature
351 <222> LOCATION: (1)..(1)
352 <223> OTHER INFORMATION: 2'-O-modified phosphoramidite

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/080,979

DATE: 03/08/2002

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Input Set : A:\ISIS5028.ST25.txt

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L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date